

Application No. 10/696,575
Amendment dated February 2, 2005
Reply to Office Action of November 3, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (cancelled)

Claim 11 (currently amended) A method of injecting a fluid into an enclosed volume including a target area, the method comprising:

- (a) partitioning the target area into a plurality of consecutively aligned sectors;
- (b) providing a lance to deliver fluid over the target area, the lance including a support block including an inlet side and an outlet side, and a plurality of injection channels disposed non-parallel to each other within the support block and extending between the inlet and outlet sides, wherein each injection channel is oriented to deliver a fluid stream into a respective sector and at least two channels have different cross-sectional dimensions.

Claim 12 (cancelled) The method of claim 11, at least two channels have different cross-sectional dimensions.

Claim 13 (original) The method of claim 11, wherein at least two channels extend from the inlet side toward the outlet side in a direction away from a central axis of the support block, the central axis intersecting the outlet side.

Claim 14 (original) The method of claim 11, wherein the channels are oriented within the support block such that a central axis of a fluid stream injected from

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each channel over the target area is centered between longitudinal boundaries defined by a respective sector.

Claim 15 (original) The method of claim 11, further comprising:

- (c) providing suitable dimensions for the channels to facilitate the flow of fluid through each channel such that the ratio of mass flow rate of fluid through each channel satisfies the following equation:

$$m_i = (A_i/A_{tot}) * m_{tot};$$

wherein m_i is the mass flow rate through each channel;

A_i is the area of the sector for a respective channel;

A_{tot} is the target area; and

m_{tot} is the sum of mass flow rates for each channel.

Claim 16 (original) The method of claim 11, further comprising:

- (c) injecting a fuel stream into the enclosed volume to intersect the target area.

Claim 17 (original) The method of claim 11, wherein the enclosed volume is partitioned into a plurality of target areas, and a plurality of lances are provided such that each lance injects fluid over a corresponding target area.